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AUTHOR Edington, Everett D.
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ABSTRACT

A review of the available research relevant to the characteristics of disadvantaged rural students shows them to be affected in several areas. The low socioeconomic status of large numbers of noncorporate-farm families and rural ethnic minority groups is a characteristic of prime importance, particularly in view of the relationship between economic status and school achievement for rural as well as urban children. In addition, the educational and occupational aspirations of rural students appear to be negatively affected by their low economic status and possibly further depressed by factors related to geographic isolation. Many rural young people who will not be able to make a satisfactory living by farming do not aspire to higher-skilled urban occupations or to the educational level which would prepare them for such work. Possibly related to socioeconomic status are other attitudes found among rural children which may further hinder their progress: low self-esteem, feelings of helplessness in the face of seemingly unconquerable environmental handicaps, and impoverished confidence in the value of education as an answer to their problems. (Author/JH)

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A SUMMARY OF RESEARCH IN RURAL EDUCATION

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Testimony to the

United States Senate

Select Committee on Equal Educational Opportunity

Everett D. Edington

Director
ERIC Clearinghouse on Rural Education and Small Schools
Box 3AP, New Mexico State University
Las Cruces, New Mexico 88001

Head
Department of Educational Administration
Box 3N, New Mexico State University
Las Cruces, New Mexico 88001

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INTRODUCTION

A number of writers pointed out that rurality by its very nature may have caused pupils to be disadvantaged. Ackerson (1967) stated at the National Outlook Conference on Rural Youth that the incidence of incentive to remain in high school or in college was evidently not as great in rural America, as shown by the high dropout rate, and in all too many cases, the educational and vocational opportunities offered to rural young people were quite limited. Lamanna and Samora (1967) obtained similar findings in a study of Mexican Americans in Texas. They stated that rural or urban residence was strongly related to educational status. Urban residents were almost always better educated than rural residents regardless of sex, age, nativity, or parentage.

It is difficult to make broad generalizations other than those previously mentioned, concerning disadvantaged rural students. Such groups as the mountain folk of the Appalachian region, the Southern rural Negroes, the American Indians, or the Spanish-speaking youth of the Southwest have special problems.

The final 1970 Census statistics (USDC, 1971) show that the total rural population is still in excess of 53 million, of which over 22 million reside in 16 Southern states and 16 million reside in 12 North Central states. Over 9 million reside in 9 Northeastern states and almost 6 million in 13 Western states. The problems experienced by the rural disadvantaged student are not limited to geographical location. Edward B. Breathitt (1967), former governor of Kentucky, emphasized this fact in his statement that the conditions of the rural disadvantaged were not confined to any one section of the United States. They exist in Appalachia and Alaska, in the Mississippi Delta and the Midwest, in New England and California. Such conditions are widespread enough to be a national problem.

EDUCATIONAL ACHIEVEMENT

All groups of disadvantaged rural students are characterized by poor educational achievement. The United States Department of Agriculture (USDA, 1966) reported that the urban population 25 years of age and over in 1960 had 11.1 average years of schooling compared to 9.5 years for rural

nonfarm and 8.8 years for rural farm people. While 19 percent of the urban population had some college education, only 11 percent of the rural population had attended college. A later publication (USDA, 1967) reported that about 19 percent of the rural youth had fallen behind at least one year and that only 12 percent of urban youth were that educationally retarded in 1960.

Baughman and Dahlstrom (1968) found in their study of a Southern rural community that white girls and boys had the highest ability levels, but white girls were highest in achievement scores. Negro girls scored about one standard deviation below the national norms on both ability and achievement scores. The Negro boys were equal to the Negro girls on ability scores at lower ages but were lower as they progressed in years.

A number of studies have shown that the Indian student is nearly equal to the Anglo at the pre-school and primary levels, but as he progresses through grade levels he falls behind. The Ohannessian (1967) and Bass and Berger (1967) studies are good examples. In each it was found that as Indian students went up the school ladder, their achievement seemed to fall progressively behind the school norms. Bass and Burger found that the situation worsened as the Indian child progressed from the sixth to the twelfth grade. Dankworth (1970) in a study of variables affecting the educational achievement of American Indian public school students in Washoe County, Nevada, concluded that residing on a rural reservation tends to hinder achievement while residing in an urban colony tends to facilitate achievement.

Palomares and Cummins (1968) found the same to be true with the small town Mexican-American population, which was characterized by a progressive drop in achievement throughout the grades. Mexican Americans were normal in achievement at first and second grade, but one grade behind by sixth grade. The investigators found the same situation in relation to perceptual-motor development of the Mexican American children. This progressive deficit in perceptual-motor development was attributed to both home and school environment. Palomares and Cummins found an almost identical situation in studies conducted at Wasco and San Ysidro, California.

Statistically significant differences in IQ scores for rural Indian, Mexican American, and Anglo students were found by Anderson and Safar

(1969). In a study in rural New Mexico they found that 55 percent of the Anglo students had high level IQ scores, 18 percent had median level scores, and 27 percent low level scores. For the Spanish American pupils the high level, median level, and low level percentages are 33, 26 and 41 respectively; for the Indian pupils, the percentage of students whose IQ scores fell into each category were 18, 9, and 73 respectively. The same type of distribution was found for achievement scores among the three groups at the elementary and high school levels.

It should be remembered, however, that it is very difficult to measure either IQ or achievement accurately with tests that are culturally biased. Wax and Wax (1964), in working with Indian children, found that proficiency in English was essential for scholastic or academic achievement. For this and other reasons, existing methods of measuring achievement and academic ability are biased against the child whose first language is not English. Henderson (1966) further substantiated this finding when working with Spanish-speaking students. It seemed that lack of training and language were seen as barriers to advancement more often than was ethnic identity.

Language difficulty is also a problem for English-speaking disadvantaged rural people who use a non-standard form of English as their first language. Skinner (1967) reported that much of the illiteracy among the Appalachian people was really the result of failure to supply the children with means of learning to use standard English effectively. A language system is imposed upon them which is totally alien to their experiences. Alien reading and writing codes are incorporated into it. Skinner further stated that when pupils could not meet the demands to learn the language system, they were labeled as problem leaders and illiterates. He said the children were not illiterates, but they appeared to be so when measured according to the middle-class language system and that the critical need in Appalachian schools is a preschool oral language program based on standard American English.

Appalachian Reading Survey (1968) evaluated the impact of Title I federally-supported local education programs on the reading competencies of elementary and secondary school students in Northern Appalachia by testing fourth-grade and seventh-grade students in sixteen school districts.

The general impact of Title I projects was considered substantial for youngsters previously not making "normal progress" in reading skill development. Although the highest-gaining projects included school districts from rural areas, small towns, and large cities, the statistically greater gains were made in rural areas. No rural districts were found among the lowest-gaining projects at the fourth-grade level.

Frost (1968) studied the effects of compensatory programs on the achievement of rural welfare recipient children using three schools in north central Arkansas. The study suggests (1) that compensatory programs based on common assumptions have little positive effect on disadvantaged children, (2) that compensation attempts must use truly creative approaches and must begin before the child enters elementary school, and (3) that primary level rural welfare recipient children are not personality misfits based on socioeconomic status but may later become so as a result of sustained academic failure.

The first comprehensive report of a 20-year-old longitudinal study by Kreitlow (1971) exploring the effects of rural school district reorganization reveals that students in the newly reorganized rural school districts had consistently higher achievement scores than those from nonreorganized districts. Upon completion of high school, boys from reorganized districts had a 6-month advantage and girls had a 13-month advantage in mental maturity over their counterparts from nonreorganized districts.

Mayeske (1968) analyzed the educational variables embodied in the Coleman report, Equality of Educational Opportunity, to determine which variables made the greatest contribution to achievement. Although regional differences were found, Mayeske concluded that student body variables (such as socioeconomic status, family structure and stability, and racial-ethnic composition) predict achievement to a greater relative degree than do school variables.

ASPIRATIONS

The research reviewed indicates that there are differences in the occupational and educational aspirations of rural youth in comparison to the aspirations of other youth and that aspirations may differ among different types of rural youth. Kuvlesky (1970) stated that there is a

tendency for creation of unrealistically high aspirations and expectations throughout the various population segments of our society which are not necessarily compatible with existing opportunities and capabilities of the individual. He found this to be particularly true for disadvantaged minorities.

Ackerson (1967) reported that only about one-tenth of rural young people would be able to remain successfully in farm life, yet the other nine-tenths were not prepared to find other types of employment in the environment of an urban community. Sewell (1963) confirmed the findings of previous educational planning studies which indicated that occupational choices of youth were related to residence.

Rural youth on the whole receive less preparation for successful entry into the world of work and have a much smaller range of occupational aspirations. Haller, Burchinal and Taves (1963) compared rural to urban youth; they discovered that the college and occupational aspirations of rural youth were lower, that they had more trouble getting a permanent job, and that their jobs were not as skilled or highly paid as those of non-rural youth. Taylor and Jones (1963) found that in the rural environment the range of occupational types was limited and that there were few if any white collar jobs represented. The youth from rural areas may not develop attitudes, desire, or motivation to achieve occupational success in white collar jobs.

Taylor and Jones (1963) further pointed out that in low-income areas, students' peer group experiences are homogeneous in terms of social class; thus, these experiences minimize the students' introduction to different values and traditions. Therefore, behavior of rural youth exhibits greater conformity to the cultural values of their own subcultural reference group. This conformity is reflected in the educational and occupational aspirations of low-income rural youth.

There is some indication that rural students from the various ethnic minority groups have lower occupational and educational aspirations than other rural youth. Drabick (1963) in his study of the aspirations of Negro and white students of vocational agriculture in North Carolina found that the Negro, male, senior agriculture student did not desire or expect to enter occupations with as great prestige as did white students. The same relative relationships existed for the educational plans of the two

groups. Crawford, Peterson and Wurr (1967) found that the Indian student had lower aspirations than other students. However, Wages (1969) found that the aspirations of rural Mexican American high school dropouts were high relative to their situation since the majority desired at least high school graduation.

Socioeconomic status of rural youth plays an important part in aspirations. Taylor and Jones (1963) reported that when emphasis on formal education was lacking, as in low-income farm families, the youth involved did not perceive education as a dominant value in American culture and consequently were not motivated to obtain education. Sperry (1965) found a relationship between standards of living and interests of rural youth. Youth from high and middle economic status group backgrounds displayed more scientific and musical interest than youth from lower standard-of-living backgrounds. Sperry felt that scientific interest was explainable in that certain cultural advantages, generally more prevalent among high and middle status groups, were known to stimulate an interest in discovering new facts and solving problems. Likewise, there might be greater emphasis and resources expended on musical interests among families with higher standards of living. Sperry (1965) and Taylor and Jones (1963) indicated that rural youth from a higher socioeconomic level had higher educational aspirations and took greater advantage of educational opportunities than rural youth from lower socioeconomic levels.

Rural Negro youth were found by Ohlendorf and Kuvlesky (1967) to be more oriented toward attaining higher levels of education than rural white youth. Negro boys and girls had higher educational expectations than white boys and girls had. Ohlendorf and Kuvlesky also discovered that much larger proportions of the Negroes desired and expected to do graduate work, while larger proportions of the whites desired and expected to terminate their education after graduating from high school. Kuvlesky and Upham (1967) found that while rural Negroes have higher educational goals, they have lower income and occupational goals than do white youth. They also differed in place of residence preferences; most Negro boys aspire to live in a large city while the white boys desire life near a large city or in a small city. Kuvlesky, Wright, and Juarez (1971), in a study of Negro, Mexican American, and Anglo youth from nonmetropolitan areas of Texas, found that Negro youth maintained higher level expectations and Mexican American youth maintained stronger intensity of aspiration. Other

patterns of ethnic variability were that Mexican American youth felt least certain of attaining their expectations, Negro youth held higher educational goals, and Anglo youth experienced the least anticipatory deflection.

These findings are particularly interesting when compared to the 1963 results reported by Drabick in his study in North Carolina, which showed lower educational aspirations and expectations among Negro students than among white youth. The explanation for the contradiction is not certain, but it may be due to more realistic aspirations among the white youth or to the differences in the populations studied, or to significant social changes during the years which elapsed between the studies.

There does not seem to be complete agreement on educational aspirations and practices of farm and non-farm youth. Sperry (1965) and Drabick (1963) reported that non-farm rural youth placed higher values on education and more of them attended college than did farm youth or those taking vocational agriculture classes in high school. Slocum (1966) did not find this true in his research in the State of Washington. He found that more farm boys (80 percent) than non-farm (72 percent) aspired to attend college. The proportion of farm to non-farm girls with college aspirations was equal. The differences in findings may be due to the higher socioeconomic level of the farmers in the Northwest section of the United States since Slocum also found that the educational aspirations and expectations of students tended to be positively related to the economic and social status of parents.

Rural schools apparently have done very little to help students change these aspiration patterns. Severinsen (1967) indicated that one of the problems of rural youth stemmed from lack of adequate occupational information. This study concluded that significant improvements in vocational knowledge among high school students resulted when increased informational services were provided. Lindstrom (1965) found that rural schools gave no assistance to students who were migrating to the cities to work. He concluded that it was a mistake for youth just finishing high school, expecially the younger ones and females, to migrate to the city to seek jobs. Rather, it would be better for these young people to remain in the community to get some job experience related to the kinds of jobs available in the city or to get advanced training of the type demanded by these occupations.

ATTITUDES

Disadvantaged rural children bring certain attitudes to school which seem to be associated with their home life and economic status. Crawford (1967) said in his discussion of the Chippewa Indian that true poverty involved something much more significant to children than just low income. Poverty involved certain prevalent attitudes which affected the children as they grew up. One common attitude which the rural poor have is the feeling that they are trapped and that there are no promising choices open to them in solving their problems. This attitude carries over into school activities. Palomares and Cummins (1968) pointed out that the Mexican American population in a small border town of Southern California tended to see itself in a less favorable way than the normative population. The self-concept of Mexican Americans seemed permeated with feelings of inadequacy and low self-esteem, both at home and at school. A weakness of this study, pointed out by the authors, was that the tests used the norms as a control population rather than comparing the attitudes of the Mexican Americans in the community with Anglos or others in the same area. Low self-esteem may well have been a characteristic true of the entire community rather than just of the Mexican Americans.

In a study of achievement among Mexican Americans, large numbers of whom are rural residents, Mayeske (1967) examined three aspects of student maturation and attitude in relation to achievement: (1) students' interest in school and persistence of reading outside school; (2) students' self-concept, especially with regard to learning and success in school; and (3) students' sense of control of the environment. Mayeske found that the attitudinal item most highly related to achievement test scores at all grade levels was students' belief in their ability to control or influence their environment. The differences in achievement associated with the belief in one's ability to control his environment remained even after differences in home background were taken into account. Coleman et al. (1966) reported similar findings for a more broadly representative population. Mayeske suggested that for children who have experienced an unresponsive environment, a change in their ability to influence their environment might lead to increased achievement.

Sperry (1965) pointed out that there were sex differences in the educational attitudes of rural children. Girl's attitudes toward an education

were more favorable and were more similar to those their parents hoped they held than were boys' attitudes. Sperry also reported that rural youth received more "strong urging" to continue their education from their mothers than from their fathers.

Educators and lay community persons often have different attitudes toward rural students from different ethnic backgrounds. Anderson and Safar (1969) reported a sharp disparity between school board members' and administrators' perceptions of the adequacy of existing school programs for Anglos, Spanish-Americans, and Indians. School board members interviewed were quite satisfied with existing programs and felt the programs were equal for all the groups of children. School administrators felt that Spanish-American and Indian students were not encouraged as much as their Anglo classmates.

CONCLUSIONS

A review of the available research relevant to the characteristics of disadvantaged rural students shows them to be affected in seven general areas. The low socioeconomic status of large numbers of noncorporate-farm rural families is a characteristic of prime importance, particularly in view of the relationship between economic status and school achievement for rural as well as urban children. In addition, the educational and occupational aspirations of rural students appear to be negatively affected by their low economic status and possibly further depressed by factors related to geographic isolation. Many rural young people who will not be able to make a satisfactory living by farming do not aspire to any higher skilled urban occupations nor to the educational level which would prepare them for such work. Possibly related to socioeconomic status are other attitudes found among rural children which may further hinder their progress: low self-esteem, feelings of helplessness in the face of seemingly unconquerable environmental handicaps, and impoverished confidence in the value and importance of education as an answer to their problems. All of those attitudes understandably may contribute to the child's failure to benefit from his schooling.

BIBLIOGRAPHY

Ackerson, Nels J. Rural Youth in a Changing World. Speech presented at the National Outlook Conference on Rural Youth, October 1967. Washington, D. C. (Mimeo.) ERIC: ED 016 549.

Anderson, James G. and Safar, Dwight. Equality of Educational Opportunity for Spanish-American and Indian Students in Two Multi-Cultural Communities: An Exploratory Assessment. Paper prepared for the United States Senate Committee on Labor and Public Welfare Special Subcommittee on Indian Education, January 1969. Las Cruces: Research Center, New Mexico State University. (Offset.) ERIC: ED 029 746.

Appalachian Reading Survey. University Park: Pennsylvania State University, June 1968. ERIC: ED 022 655.

Bass, Willard P. and Burger, Henry G. American Indians and Educational Laboratories. Albuquerque, New Mexico: Southwestern Cooperative Educational Laboratory, 1967. ERIC: ED 014 369.

Baughman, E. Earl and Dahlstrom, W. Grant. Negro and White Children, A Psychological Study in the Rural South. New York: Academic Press, 1968.

Breathitt, Edward T. The Status of Rural America. Speech presented at the National Outlook Conference on Rural Youth, October 1967. Washington, D. C. (Mimeo.) ERIC: ED 015 075.

Coleman, James S. et al. Equality of Educational Opportunity. U. S. Department of Health, Education, and Welfare, Office of Education, Washington, D. C.: Superintendent of Documents, Government Printing Office, 1966. ERIC: ED 012 275.

Crawford, Dean A.; Peterson, David L.; and Wurr, Virgil. Minnesota Chippewa Indians, A Handbook for Teachers. St. Paul, Minnesota: Upper Midwest Regional Educational Laboratory, 1967. ERIC: ED 017 383.

Dankworth, Richard T. and Jacobson, James A. Educational Achievement of Indian Students in Public Secondary Schools as Related to Eight Variables, Including Residential Environment. Logan: Utah State University, May 1970. ERIC: ED 042 526.

Drabick, Lawrence W. Occupational and Educational Plans of Vocational Agriculture Students in North Carolina--A Comparison with Other Students. Educational Research Series No. 1. Raleigh: Departments of Agricultural Education and Rural Sociology, North Carolina State University, 1963. ERIC: ED 012 756.

Frost, Joe L. Effects of an Enrichment Program on the School Achievement of Rural Welfare Recipient Children. Austin: University of Texas, July 1968. ERIC: ED 021 675.

Haller, Archibald O.; Burchinal, Lee G.; and Taves, Marvin J. Rural Youth Need Help in Choosing Occupations. Circular Bulletin No. 35. East Lansing: Department of Sociology and Anthropology, Michigan State University, 1963. ERIC: ED 011 806.

Henderson, Ronald W. Environmental Stimulation and Intellectual Development of Mexican-American Children: An Exploratory Project. Cooperative Research Project No. 6-8068-2-12-1. Tucson: University of Arizona, 1966. ERIC: ED 010 587.

Kreitlow, Burton W. Long-term Study of Educational Effectiveness of Newly Formed Centralized School Districts in Rural Areas. Madison: Wisconsin Research and Development Center for Cognitive Learning, The University of Wisconsin, April 1971. ERIC: ED 049 884.

Kuvlesky, William P. Implications of Recent Research on Occupational and Educational Ambitions of Disadvantaged Rural Youth for Vocational Education. Paper presented at "Institute 4: Expanding Vocational Education Curriculums to Meet the Needs of Disadvantaged Youth and Adults in Rural Areas," Mississippi State University, July 1970. ERIC: ED 041 692.

Kuvlesky, William P. and Upham, W. Kennedy. Social Ambitions of Teen-age Boys Living in an Economically Depressed Area of the South--A Racial Comparison. Paper presented at the Southern Sociological Society meetings, Atlanta, Georgia, March 1967. ERIC: ED 014 339.

Kuvlesky, William P.; Wright, David E.; and Juarez, Rumaldo Z., "Status Projections and Ethnicity: A Comparison of Mexican American, Negro, and Anglo Youth," Journal of Vocational Behavior, Vol. 1, No. 2, April 1971, p. 137-151.

Lamanna, Richard A. and Samora, Julian. Recent Trends in Educational Status of Mexican-Americans. Reprint from the proceedings of the first Texas Conference for the Mexican-American. South Bend, Indiana: University of Notre Dame, 1967. ERIC: ED 020 813.

Lindstrom, D. E. "Educational Needs of Rural Youth," Journal of Cooperative Extension, Vol. 3, pp. 33-41, Spring 1965. ERIC: ED 011 785.

Mayeske, George W. Educational Achievement Among Mexican-Americans: A Special Report from the Educational Opportunities Survey. U. S. Department of Health, Education, and Welfare, Office of Education, Technical Note No. 22. Washington, D. C.: National Center for Educational Statistics, Division of Operations Analysis, 1967. ERIC: ED 015 040.

Mayeske, George W. and others. Correlational and Regression Analyses of Differences Between the Achievement Levels of Ninth Grade Schools From the Educational Opportunities Survey. Washington, D. C.: Division of Operations Analysis, National Center for Educational Statistics, Office of Education, Department of Health, Education, and Welfare, March 1968. ERIC: ED 017 600.

Ohannessian, Sirarpi. The Study of the Problems of Teaching English to American Indians. Washington, D. C.: Center for Applied Linguistics, 1967. ERIC: ED 014 727.

Ohlendorf, George W. and Kuvlesky, William P. Racial Differences in the Educational Orientations of Rural Youth. Paper presented to the Southwestern Sociological Association, March 1967. College Station: Texas A & M University. (Offset.) ERIC: ED 013 146.

Palomares, Uvaldo H. and Cummins, Emery J. Assessment of Rural Mexican-American Pupils Preschool and Grades One Through Six, San Ysidro, California. Sacramento: Mexican-American Research Project, California State Department of Education, 1968. ERIC: ED 020 845.

Palomares, Uvaldo H. and Cummins, Emery J. Assessment of Rural Mexican-American Pupils Preschool and Grades One Through Twelve, Wasco, California. Sacramento: Mexican-American Research Project, California State Department of Education, 1968. ERIC: ED 020 846.

Severinsen, K. Norman. Vocational-Educational Information Workshop for Rural Guidance Workers. U. S. Department of Health, Education, and Welfare, Office of Education, Bureau of Research, Project No. 6-2208. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1967. ERIC: ED 015 042.

Sewell, William H. The Educational and Occupational Perspectives of Rural Youth. Paper prepared for the National Conference on Problems of Rural Youth in a Changing Environment, September 1963. Washington, D. C.: National Committee for Children and Youth. (Mimeo.) ERIC: ED 019 169.

Skinner, Vincent P. "Mountaineers Aren't Really Illiterate," Southern Education Report 3: 18-19, 1967. ERIC: ED 020 236.

Slocum, Walter L. Educational Aspirations of Farm Boys and Girls. Cooperative Research Project No. 2055. Pullman: College of Agriculture, Washington State University, 1966. ERIC: ED 010 273.

Sperry, Irwin V. et al. Educational and Vocational Goals of Rural Youth in the South. Bulletin 107, Southern Cooperative Series. Raleigh: North Carolina State University, 1965. ERIC: ED 012 743.

Taylor, Lee and Jones, Arthur R., Jr. White Youth from Low-Income Rural Families: Achievement Milieu and Agribusiness Opportunities. Paper prepared for the National Conference on Problems of Rural Youth in a Changing Environment, September 1963. Washington, D. C.: National Committee for Children and Youth. (Mimeo.) ERIC: ED 012 663.

U. S. Department of Agriculture. Age of Transition, Rural Youth in a Changing Society. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1967. ERIC: ED 013 696.

U. S. Department of Agriculture. Rural People in the American Economy. Economic Research Service, Agricultural Economic Report No. 101, October 1966. ERIC: ED 034 615.

U. S. Department of Commerce, Bureau of the Census. Final Population Counts. PC(V1)-1 U. S., February 1971.

Wages, Sherry and others. Mexican American Teen-age School Dropouts: Reasons for Leaving School and Orientations Toward Subsequent Educational Attainment. Paper presented at the Southwestern Sociological Association meetings, Houston, Texas, April 1969. ERIC: ED 028 854.

Wax, Rosalie H. and Wax, Murray L. Dropout of American Indians at the Secondary Level. Cooperative Research Project No. S-099. Atlanta, Georgia: Emory University, 1964. ERIC: ED 003 853.